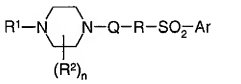
AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application. Please amend claims 1, 3, 5, 8-14, 20, 23, and 27. Please cancel claims 18-19, 24-26, and 28-29. Please add new claims 30-32.

LISTING OF THE CLAIMS:

1. (Currently Amended) An N-[(piperazinyl)hetaryl]arylsulfonamide compound of the general formula I



(I)

in which

R is oxygen, a group N-R^3 or a group $CR^{3a}R^{3b}$;

Q is a bivalent, 6-membered heteroaromatic radical ~~which possesses 1 or 2 N atoms as ring members~~ selected from pyridindiyl and pyrimidindiyl, and which optionally carries one or two substituents R^a which is/are selected, independently of each other, from halogen, CN, NO_2, CO_2R^4, COR^5, C_1-C_4-alkyl, C_1-C_4-alkoxy, C_1-C_4-haloalkyl, NH_2, NHR^6, NR^6R^7 and C_1-C_4-haloalkoxy;

Ar is phenyl or a 6-membered heteroaromatic radical ~~which possesses 1 or 2 N atoms as ring members~~ selected from pyridinyl and pyrimidinyl, and which ~~optionally~~ carries one or two substituents R^b, which is/are selected from halogen, NO_2, CN, CO_2R^4, COR^5, ~~NH_2,~~ NHR^6, NR^6R^7, C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_1-C_6-alkoxy, C_1-C_6~~22~~-haloalkoxy, C_2-C_6-alkenyl, C_2-C_6-alkynyl, C_3-C_6-cycloalkyl, C_3-C_6-cycloalkoxy, C_3-C_6-cycloalkyl-C_1-C_4-alkyl and C_1-C_4-haloalkyl, with it also being possible for two radicals R^b which are bonded to adjacent C atoms of Ar to be together C_3-C_4-alkylene;

n is 0, 1 or 2;

R^1 is hydrogen, C_1-C_4-alkyl, C_1-C_4-haloalkyl, C_3-C_6-cycloalkyl, C_3-C_6-cycloalkyl-C_1-C_4-alkyl, C_1-C_4-hydroxyalkyl, C_1-C_4-alkoxy-C_1-C_4-alkyl, C_3-C_4-alkenyl or C_3-C_4-alkynyl;

R^2 is C_1-C_4-alkyl or, together with R^1, is C_2-C_5-alkylene or, in the case of n = 2, the two radicals R^2 can together be C_1-C_4-alkylene;

R^3 is hydrogen or C_1-C_4-alkyl;

R^{3a}, R^{3b} are, independently of each other, hydrogen or C_1-C_4-alkyl;

R^4 is C_1-C_4-alkyl, C_1-C_4-haloalkyl, C_2-C_4-alkenyl C_3-C_6-cycloalkyl, C_3-C_6-cycloalkyl-C_1-C_4-alkyl, phenyl or benzyl; and

R^5 is hydrogen, C_1-C_4-alkyl, C_1-C_4-haloalkyl, C_2-C_4-alkenyl C_3-C_6-cycloalkyl, C_3-C_6-cycloalkyl-C_1-C_4-alkyl, phenyl or benzyl;

R^6, R^7 are each independently selected from C_1-C_4-alkyl, C_1-C_4-haloalkyl or together with the nitrogen to which they are bound form a saturated 3-, 4-, 5- or 6-membered heterocycle, which additionally may comprise an oxygen atom or an additional nitrogen atom as a ring member and which may carry 1, 2, 3 or 4 C_1-C_4 alkyl groups;

the N-oxides thereof and the physiologically tolerated acid addition salts of these compounds;

with the exception of the compounds: 4-methyl-N-[6-(4-methylpiperazin-1-yl)pyridin-3-yl)benzenesulfonamide and 4-chloro-N-[6-(4-methylpiperazin-1-yl)pyridin-3-yl)benzenesulfonamide.

2. (Previously Presented) The compound as claimed in claim 1, wherein R is N-R^3 with R^3 being H or C_1-C_4-alkyl.

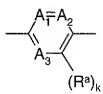
3. (Currently Amended) The compound as claimed in claim 2, wherein

Q is a bivalent, 6-membered heteroaromatic radical ~~which possesses 1 or 2 N atoms as ring members~~ selected from pyridindiyl and pyrimidindiyl, and which optionally carries one or two substituents R^a which is/are selected, independently of each other, from halogen, CN, NO_2, CO_2R^4, COR^5, C_1-C_4-alkyl and C_1-C_4-haloalkyl and

Ar is phenyl or a 6-membered heteroaromatic radical ~~which possesses 1 or 2 N atoms as ring members~~ selected from pyridinyl and pyrimidinyl, and which ~~optionally~~ carries one or two substituents R^b, which is/are selected from halogen, NO_2, CN, CO_2R^4, COR^5, C_1-C_6-alkyl, C_2-C_6-alkenyl, C_2-C_6-alkynyl, C_3-C_6-cycloalkyl, C_3-C_6-cycloalkyl-C~~\pard plain~~$_1$-C_4-alkyl and C_1-C_4-haloalkyl, with it also being possible for two radicals R^b which are bonded to adjacent C atoms of Ar to be together C_3-C_4-alkylene.

4. (Previously Presented) The compound as claimed in claim 1, in which the piperazine ring is bonded to the heteroaromatic radical Q in the para position in relation to the group R-SO_2-Ar.

5. (Currently Amended) The compound as claimed in claim 1, in which Q is a radical of the formula



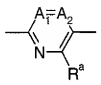
~~in which A_1, A_2 and A_3 are, independently of each other, N or CH, one or two of the variables A_1, A_2 and A_3 can also be C-R^a,~~ one of the variables A_1, A_2 or A_3 is N, the remaining two variables being CH or C-R^a, or A_1 and A_3 are N and A_2 is CH or C-R^a, k = 0 or 1 and R^a is selected from halogen, C_1-C_4-alkyl, C_1-C_4-haloalkyl, C_1-C_4-alkoxy, NH_2, NHR^6, NR^6R^7 and C_1-C_4-haloalkoxy, with the proviso that k is 0 if two of the variables A_1, A_2 and A_3 are C-R^a ~~with A_1, A_2 and A_3 not simultaneously being N or simultaneously~~

~~being selected from CH and C-R^a~~.

6. (Previously Presented) The compound as claimed in claim 5, in which A_3 is nitrogen, A_2 is CH and A_1 is N or CH and wherein the piperazine radical is located in the 2 position.

7. (Previously Presented) The compound as claimed in claim 6, in which Q is pyridin-2,5-diyl which carries the piperazine radical in the 2 position.

8. (Currently Amended) The compound as claimed in claim ~~6~~ 5, in which Q is a radical of the formula



in which ~~A_1 and A_2 are, independently of each other, N or CH~~ A_1 is N or CH and A_2 is CH and R^a is selected from C_1-C_4-alkoxy, NH_2, NHR^6, NR^6R^7 and C_1-C_4-haloalkoxy.

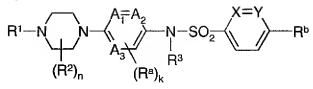
9. (Currently Amended) The compound as claimed in claim 8, in which ~~A_1 is N or CH and A_2 is CH and wherein~~ the piperazine radical is located in the 2 position.

10. (Currently Amended) The compound as claimed in claim 1, in which the radical Ar carries a substituent R^b in the para position and~~, where appropriate,~~ optionally, a further substituent R^b in the meta position or in the ortho position, in each case based on the binding site of the sulfonamide group.

11. (Currently Amended) The compound as claimed in claim 1, in which Ar is phenyl or pyridyl, which radicals possess~~, where appropriate,~~ one or 2 R^b substituents.

12. (Currently Amended) The compound as claimed in claim 1, in which R^1 is ~~different from~~ not hydrogen ~~and~~ or methyl.

13. (Currently Amended) The compound as claimed in claim 1 of the general formula Ia



(Ia)

in which n, R^1, R^2, R^3, R^a and R^b have the meanings given in claim 1 and in which ~~either A_1, A_2 and A_3 are, independently of each other, N or CH and one or two of the variables A_1, A_2 and A_3 can also be C-R^a~~ one of the variables A_1, A_2 or A_3 is N, the remaining two variables being CH or C-R^a, or A_1 and A_3 are N and A_2 is CH or C-R^a, with the proviso that k is 0 if two of the variables A_1, A_2 and A_3 are C-R^a,

X and Y are selected from CH, C-$R^{b'}$ and N, in which $R^{b'}$ is halogen, methyl, CN, difluoromethyl or trifluoromethyl, with X and Y not simultaneously being N or simultaneously being C-$R^{b'}$, and

k is 0 or 1.

14. (Currently Amended) The compound of the formula Ia as claimed in claim 13, in which k = 0, ~~with A_1, A_2 and A_3 being, independently of each other, N or CH and A_1, A_2 and A_3 not simultaneously being N or simultaneously being CH~~ and one of the variables A_1, A_2 or A_3 is N, the remaining two variables being CH, or A_1 and A_3 are N and A_2 is CH.

15. (Previously Presented) The compound of the formula Ia as claimed in claim 14, in which A_1 is CH or N, A_2 is CH and A_3 is N.

16. (Previously Presented) The compound of the formula Ia as claimed in claim 13, in which k is 1, A_1 is CH or N, A_2 is CH and A_3 is N, and R^a is selected from C_1-C_4-alkoxy, NH_2, NHR^6, NR^6R^7 and C_1-C_4-haloalkoxy and R^a is bound to the carbon atom adjacent to A_3.

17. (Previously Presented) The compound of the formula Ia as claimed in claim 13, in which n is 0 or 1 and, in the case of n = 1, R^2 is bonded to the C atom of the piperazine ring which is adjacent to the group R^1-N and is a methyl group having the S configuration.

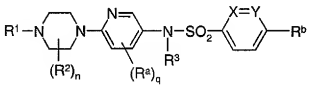
18. (Canceled) The compound of the formula Ia as claimed in claim 13, in which the radical Ar carries a substituent R^b in the para position and, where appropriate, a further

substituent R^b in the meta position or in the ortho position, in each case based on the binding site of the sulfonamide group.

19. (Canceled) The compound of the formula Ia as claimed in claim 13, in which Ar is phenyl or pyridyl, which radicals possess, where appropriate, one or 2 R^b substituents.

20. (Currently Amended) The compound of the formula Ia as claimed in claim 13, in which R^1 is ~~different from~~ not hydrogen ~~and~~ or methyl.

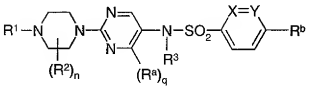
21. (Previously Presented) The compound of the formula Ia as claimed in claim 13, of the general formula Ia.1



(Ia.1)

in which n, X, Y, R^1, R^2, R^3, R^a and R^b have the meanings given in claim 13 and q is 0, 1 or 2.

22. (Previously Presented) The compound of the formula Ia as claimed in claim 13, of the general formula Ia.2



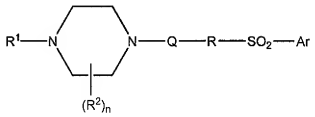
(Ia.2)

in which n, X, Y, R^1, R^2, R^3, R^a and R^b have the meanings given in claim 13 and q is 0 or 1.

23. (Currently Amended) A pharmaceutical composition which comprises at least one N-[(piperazinyl)hetaryl]arylsulfonamide compound as claimed in claim 1 and/or at least one physiologically tolerated acid addition salt of I and/or an N-oxide of I, ~~where appropriate~~

together with physiologically acceptable carriers and/or auxiliary substances.

24. (Canceled) The use of at least one N-[(piperazinyl)hetaryl]arylsulfonamide compound of the formula I



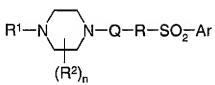
(I)

in which Q, Ar, n, R^1, R^2 and R^3 have the previously mentioned meanings, of the N-oxides thereof and of the physiologically tolerated acid addition salts thereof for producing a pharmaceutical composition for treating diseases which respond to influencing by dopamine D_3 receptor antagonists or dopamine D_3 agonists.

25. (Canceled) The use as claimed in claim 24 for treating diseases of the central nervous system.

26. (Canceled) The use as claimed in claim 24 for treating kidney function disturbances.

27. (Currently Amended) A method for treating a medical disorder susceptible to treatment with a dopamine D_3 receptor antagonist or a dopamine D_3 agonist, the medical disorder selected from Parkinson's disease and schizophrenia, said method comprising administering an effective amount of at least one compound of the formula I of claim 1



(I)

to a subject in need thereof.

28. (Canceled) The method as claimed in claim 27, wherein the medical disorder is a disease of the central nervous system.

29. (Canceled) The method as claimed in claim 27 wherein the medical disorder is a disturbance of kidney function.

30. (New) The compound of claim 1 selected from the group consisting of:
N-[6-(4-Allylpiperazin-1-yl)pyridin-3-yl]-4-isopropylbenzenesulfonamide;
N-[6-(4-Allylpiperazin-1-yl)pyridin-3-yl]-4-propylbenzenesulfonamide;
N-[6-(4-Allylpiperazin-1-yl)pyridin-3-yl]-4-butylbenzenesulfonamide;
N-[6-(4-Allylpiperazin-1-yl)pyridin-3-yl]-4-trifluoromethylbenzenesulfonamide;
N-[6-(4-Allylpiperazin-1-yl)pyridin-3-yl]-4-ethylbenzenesulfonamide;
N-[6-(4-Allylpiperazin-1-yl)pyridin-3-yl]-4-vinylbenzenesulfonamide;
4-Isopropyl-N-(6-piperazin-1-ylpyridin-3-yl)benzenesulfonamide;
N-{6-[4-(Cyclohexylmethyl)piperazin-1-yl]pyridin-3-yl}-4-isopropyl-benzenesulfonamide;
N-[6-(4-Isobutylpiperazin-1-yl)pyridin-3-yl]-4-isopropylbenzenesulfonamide;
4-Isopropyl-N-[6-(4-methylpiperazin-1-yl)pyridin-3-yl]benzenesulfonamide;
N-[6-(4-Ethylpiperazin-1-yl)pyridin-3-yl]-4-isopropylbenzenesulfonamide;
N-{6-[4-(Cyclopropylmethyl)piperazin-1-yl]pyridin-3-yl}-4-isopropyl-benzenesulfonamide;
N-[6-(4-Allyl-3-methylpiperazin-1-yl)pyridin-3-yl]-4-isopropylbenzenesulfonamide;
N-{6-[4-Allyl-(3S)-methylpiperazin-1-yl]pyridin-3-yl}-4-isopropylbenzenesulfonamide, S enantiomer;
4-Isopropyl-N-[6-(3-methyl-4-propylpiperazin-1-yl)pyridin-3-yl]benzenesulfonamide;
4-Isopropyl-N-{6-[(3S)-methyl-4-propylpiperazin-1-yl]pyridin-3-yl}benzenesulfonamide, S enantiomer;
N-[5-(4-Allylpiperazin-1-yl)pyridin-2-yl]-4-isopropylbenzenesulfonamide;
N-[2-(4-Allylpiperazin-1-yl)pyrimidin-5-yl]-4-isopropylbenzenesulfonamide;
4-Isopropyl-N-[2-(4-propylpiperazin-1-yl)pyrimidin-5-yl]benzenesulfonamide;
N-[6-(4-Allylpiperazin-1-yl)pyrimidin-4-yl]-4-isopropylbenzenesulfonamide;
N-[2-(4-Allylpiperazin-1-yl)pyridin-5-yl]-4-bromobenzenesulfonamide;
N-[6-(4-Allylpiperazin-1-yl)pyridin-3-yl]-4-cyclopropylbenzenesulfonamide;
4-Isopropyl-N-[2-(4-propylpiperazin-1-yl)pyridin-3-yl]-benzenesulfonamide;

4-Isopropyl-N-[2-(3,5-dimethyl-4-propylpiperazin-1-yl)pyridin-3-yl]benzenesulfonamide;
N-[2-(4-Allyl-3-methylpiperazin-1-yl)pyridin-3-yl]-4-trifluoromethylbenzenesulfonamide;
N-[6-(4-Allyl-3,5-dimethylpiperazin-1-yl)pyridin-3-yl]-4-isopropylbenzenesulfonamide;
N-[6-(4-Allyl-3,5-dimethylpiperazin-1-yl)pyridin-3-yl]-4-trifluoromethylbenzenesulfonamide;
N-[6-(4-Allylpiperazin-1-yl)pyridin-3-yl]-4-trifluoromethylbenzenesulfonamide;
4-Bromo-N-[6-(4-propylpiperazin-1yl)pyridin-3-yl]-benzenesulfonamide;
4-Chloro-N-[6-(4-propylpiperazin-1yl)pyridin-3-yl]-benzenesulfonamide;
4-Isopropyl-N-[6-(5-propyl-2,5-diazabicyclo[2.2.1]hept-2-yl)pyridin-3-yl]-benzenesulfonamide;
N-[6-(5-Allyl-2,5-diazabicyclo[2.2.1]hept-2-yl)pyridin-3-yl]-4-isopropylbenzenesulfonamide;
N-[6-(4-Propylpiperazin-1-yl)pyridin-3-yl]-4-vinylbenzenesulfonamide;
N-{6-[4-(3-Fluoropropyl)piperazin-1-yl]pyridin-3-yl}-4-isopropylbenzenesulfonamide;
4-Isopropyl-N-[6-(4-prop-2-yn-1-ylpiperazin-1-yl)pyridin-3-yl]-benzenesulfonamide;
4-Ethyl-N-[6-(4-propylpiperazin-1-yl)pyridin-3-yl]-benzenesulfonamide;
N-[6-(4-Allylpiperazin-1-yl)pyridin-3-yl]-4-chlorobenzenesulfonamide;
4-Isopropyl-N-(4-methyl-6-piperazin-1-ylpyridin-3-yl)-benzenesulfonamide;
N-[6-(4-Allylpiperazin-1-yl)-4-methylpyridin-3-yl]-4-isopropylbenzenesulfonamide;
4-Isopropyl-N-[4-methyl-6-(4-propylpiperazin-1-yl)pyridin-3-yl]-benzenesulfonamide;
N-[4-Methyl-6-(4-propylpiperazin-1-yl)pyridin-3-yl]-4-vinylbenzenesulfonamide;
N-[6-(4-Butylpiperazin-1-yl)pyridin-3-yl]-4-isopropylbenzenesulfonamide;
N-{6-[(3S)-4-Ethyl-3-methylpiperazin-1-yl]pyridin-3-yl}-4-isopropylbenzenesulfonamide;
N-[2-(4-Allylpiperazin-1-yl)pyridin-5-yl]-4-(N-pyrrolidinyl)benzenesulfonamide;
4-Isopropyl-[N-[2-(4-allylpiperazin-1-yl)-6-methylpyridin-5-yl]-4-(N-pyrrolidinyl)benzenesulfonamide;
4-tert-Butyl-[N-[2-(4-allylpiperazin-1-yl)-6-methylpyridin-5-yl]-benzenesulfonamide;
4-tert-pentyl-[N-[2-(4-allylpiperazin-1-yl)-6-methylpyridin-5-yl]-benzenesulfonamide;
4-Ethyl-N-[6-((S)-3-methyl-4-propyl-piperazin-1-yl)-pyridin-3-yl]-benzenesulfonamide;
N-[6-((S)-3-methyl-4-propyl-piperazin-1-yl)-pyridin-3-yl]-4-vinylbenzenesulfonamide;
N-[6-((S)-4-Allyl-3-methyl-piperazin-1-yl)-2-methoxy-pyridin-3-yl]-4-isopropyl-benzenesulfonamide;
4-Isopropyl-N-[2-methoxy-6-((S)-3-methyl-4-propyl-piperazin-1-yl)-pyridin-3-yl]-benzenesulfonamide;

N-[6-((S)-4-Allyl-3-ethyl-piperazin-1-yl)-pyridin-3-yl]-4-isopropylbenzenesulfonamide;
N-[6-((S)-3-Ethyl-4-propyl-piperazin-1-yl)-pyridin-3-yl]-4-isopropylbenzenesulfonamide;
4-Isopropyl-N-(2-piperazin-1-yl-pyrimidin-5-yl)-benzenesulfonamide;
N-[2-(4-Ethyl-piperazin-1-yl)-pyrimidin-5-yl]-4-isopropyl-benzenesulfonamide;
N-[2-((S)-4-Ethyl-3-methyl-piperazin-1-yl)-pyrimidin-5-yl]-4-isopropyl-benzenesulfonamide;
N-[2-((S)-4-Allyl-3-methyl-piperazin-1-yl)-pyrimidin-5-yl]-4-isopropylbenzenesulfonamide;
4-Isopropyl-N-[2-((S)-3-methyl-4-propyl-piperazin-1-yl)-pyrimidin-5-yl]-benzenesulfonamide;
4-Ethyl-N-[2-((S)-3-methyl-4-propyl-piperazin-1-yl)-pyrimidin-5-yl]-benzenesulfonamide;
N-[2-((S)-3-Methyl-4-propyl-piperazin-1-yl)-pyrimidin-5-yl]-4-vinyl-benzenesulfonamide;
4-Isopropyl-benzenesulfonic acid 6-(4-allyl-piperazin-1-yl)-pyridin-3-yl ester; and,
4-Isopropyl-benzenesulfonic acid 6-(4-propyl-piperazin-1-yl)-pyridin-3-yl ester.

31. (New) A pharmaceutical composition which comprises at least one compound as claimed in claim 30 and/or at least one physiologically tolerated acid addition salt of I and/or an N-oxide of I together with physiologically acceptable carriers and/or auxiliary substances.

32. (New) A method for treating a medical disorder susceptible to treatment with a dopamine D_3 receptor antagonist or a dopamine D_3 agonist, the medical disorder selected from Parkinson's disease and schizophrenia, said method comprising administering an effective amount of at least one compound as claimed in claim 30 to a subject in need thereof.